

WHAT IS CLAIMED IS:

1. An image-forming device which forms an image on a recording material at a heating drum heated to a predetermined temperature, the device comprising:

a heating device which heats the heating drum; and

a control device which controls the heating device by on/off control, and alters a period of on/off control in accordance with control modes, the control modes including a printing mode for maintaining the heating drum at the predetermined temperature during image-formation, and at least one ordinary mode which is used at times other than during image-formation,

wherein, if a period of on/off control of the printing mode is T1 and a period of on/off control of the at least one ordinary mode is T0, then

$T1 < T0$ .

2. The image-recording device of claim 1, wherein the ordinary mode includes a standby mode which maintains temperature of the heating drum at the predetermined temperature such that image-formation can be initiated promptly, and a pre-heating mode which reduces power consumption of the heating drum while keeping the heating drum in a state such that image-formation can be initiated in a short time, and, if the period of on/off control of the printing mode is T1, a period of on/off control of the standby mode is T2 and a

period of on/off control of the pre-heating mode is T3, then at least one of the following relationships:

$T1 < T2$  and

$T1 < T3$

is satisfied.

3. The image-forming device of claim 2, wherein the periods T1, T2 and T3 are set so as to satisfy the relationship  $T1 < T2 < T3$ .

4. The image-forming device of claim 1, wherein information of the image is recorded onto a photosensitive material by exposure, and the image is formed on a transfer material which is superposed with the photosensitive material at the heating drum.

5. The image-forming device of claim 1, wherein the control device alters a duty ratio of on/off control in response to a difference between a current temperature of the heating drum and the predetermined temperature.

6. The image-forming device of claim 1, wherein from a time when a power source of the image-forming device is turned on until a time when the predetermined temperature is reached, the period of on/off control of the heating drum is set to a period the same as the period of on/off control of the printing mode, and when the predetermined temperature has been reached, the ordinary mode is selected for

maintaining the predetermined temperature.

7. The image-forming device of claim 2, wherein, when image-formation has finished, the printing mode is deselected and the standby mode is selected.

8. The image-forming device of claim 2, wherein, if the standby mode is selected and no image-formation is performed for a predetermined period of time, then the pre-heating mode is selected.

9. The image-forming device of claim 2, wherein, in the pre-heating mode, the heating drum is maintained at a temperature lower than the predetermined temperature.

10. The image-forming device of claim 1, wherein there is another temperature control signal at the image-forming device, and a temperature control signal of the heating drum has a phase difference with respect to the other temperature control signal.

11. The image-forming device of claim 1, wherein information of the image is recorded onto a light and heat sensitive material by exposure, and the image is formed on the light and heat sensitive material by heating at the heating drum.

12. An image-forming device in which image information is

exposed onto and carried by photosensitive material, and an image is formed on transfer material by the transfer material being superposed with the photosensitive material at a heating drum heated to a predetermined temperature, the device comprising:

a heating device which heats the heating drum; and

a control device which controls the heating device by on/off control, and alters a period of on/off control in accordance with control modes, the control modes including a printing mode for maintaining the heating drum at the predetermined temperature during image-formation, a standby mode for keeping the heating drum in a state such that image-formation can be initiated promptly, and a pre-heating mode for reducing power consumption of the heating drum while keeping the heating drum in a state such that image-formation can be initiated in a short time,

wherein, if a period of on/off control of the printing mode is T1, a period of on/off control of the standby mode is T2 and a period of on/off control of the pre-heating mode is T3, then

$T1 \leq T2$ ,

$T1 \leq T3$ ,

and at least one of T2 and T3 is greater than T1.

13. The image-forming device of claim 12, wherein  $T1 < T2 < T3$ .